

Examination Scope: PHYSICAL EDUCATION
Year: 10
TERM 1 EXAM

Preparation:

Topics in the assessment are listed below. It is essential that you build on your knowledge and success so far this year by focusing on these topics and filling in any gaps that you may have in your understanding.

In the time between now and the exam please ensure that you prepare in a **quiet place away from any distractions or with other PE students, to share knowledge, link information with examples, practice exam questions etc.**

Revision:

- Use your flash cards to help you revise the definitions of key terms.
- Read through your classwork and booklets.
- Practice answering long questions worth 3+ marks. Often these questions will include the words 'Explain' or 'Describe' such as *Explain how antagonistic pairs work together*. This will require you to link your knowledge from different parts of a topic and applying sporting examples.
- Use the BBC Bitesize website to check your knowledge and complete quizzes.
- Work with another student and check each other's understanding. Test each other's knowledge of key facts such as the names of bones and muscles as well as how each joint moves and why.
- Ensure that you can link these key facts in sporting examples such as during a Tennis serve, how is the shoulder joint moving and which bones and muscles are enabling this.

Exam Materials:

Writing equipment (A pen that writes in black or blue ink, pencil, eraser and sharpener).

Exam Date	Exam Type	Exam Length
19th November 2018 12:10pm	Paper 1 - Theory	1 hour

Topics to Revise: Anatomy and Physiology

Topic	Details
Functions of the skeleton	The functions of the skeleton, to include: <ul style="list-style-type: none"> • shape and support • muscle attachment for movement • protection • red blood cell production. Refer to the functions in sporting examples.
Bones of the skeleton	Classify the bones specified below as long, short irregular or flat. The location and function of the following bones: • cranium • clavicle • scapula • humerus • radius • ulna • carpals, metacarpals, phalanges • ribs • pelvis • femur • tibia • fibula • patella • talus • tarsals, metatarsals, phalanges.
Joint types	Examples of the different types of joints: <ul style="list-style-type: none"> • fixed or immovable joints / fibrous joints • slightly movable / cartilaginous joints • freely movable joints / synovial joints – ball and socket and hinge.
Joint structure and function	The structure of a synovial joint and function of its components: <ul style="list-style-type: none"> • synovial membrane • synovial fluid • joint (fibrous) capsule • cartilage • ligaments
Movement at joints	Describe types of movement in physical activities: <ul style="list-style-type: none"> • flexion / extension • abduction / adduction • rotation • plantar flexion / dorsiflexion. Compare the range of movement and stability of ball and socket joints with hinge joints.
Muscles	The location and role of the following muscles: <ul style="list-style-type: none"> • latissimus dorsi • trapezius • deltoid • pectorals • biceps • triceps • abdominals • gluteals • hip flexors • hamstrings • quadriceps • gastrocnemius • tibialis anterior. The role of tendons
Antagonistic muscle action and muscle contractions	With reference to the shoulder, elbow, hip, knee and ankle: <ul style="list-style-type: none"> • the action of agonists (prime movers) and antagonists • how the muscles / muscle groups work using isotonic (concentric / eccentric) and isometric contractions.
Muscle fibre types	The differences between muscle fibre types (slow and fast twitch) with reference to physical activities, limited to: <ul style="list-style-type: none"> • force created • fatigue tolerance • aerobic/anaerobic energy supply
Components of blood	The function of: <ul style="list-style-type: none"> • plasma • red blood cells • white blood cells • platelets.
Haemoglobin	The role of haemoglobin in carrying oxygen and carbon dioxide.
Blood vessels	The basic structure (wall thickness, lumen size and presence of valves) and function of: <ul style="list-style-type: none"> • arteries • capillaries • veins.

Exam Advice:

- Read each question thoroughly before answering and look at how many marks it is worth.
- When stuck on a question move on to the next one and come back to it.
- Try to write something for every question. No answer means no marks awarded.
- Cross out mistakes and write the answer again neatly.
- If there is lots of space to write the answer, the answer needs to include several points, a reason why, and explain the answer in detail e.g. long mark questions (3-5 marks) try to give 3-5 points. Giving only one point will probably get only 1 mark.
- Read through your answers and make sure you have not repeated the same point twice instead of two different points or contradicted one of your points later in the explanation.
- All sporting examples must be of sports that you can be assessed in for IGCSE PE. The list of activities can be found in this booklet.

<https://www.cambridgeinternational.org/Images/411735-2019-coursework-guidelines-booklet.pdf>